



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 24 2013

OFFICE OF
AIR AND RADIATION

The Honorable Aaron Schock
Member, U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Schock:

Thank you for your inquiry of July 17, 2013, regarding Enviro-Safe and the U.S. Environmental Protection Agency's Significant New Alternatives Policy (SNAP) program under section 612 of the Clean Air Act. That section requires the EPA to evaluate substitutes for ozone-depleting substances to reduce overall risk to human health and the environment. The EPA has issued regulations implementing section 612 that require any producer of a substitute for an ozone-depleting substance to notify the EPA and comply with the requirements at 40 CFR Subpart G so that the EPA can determine if the substitute is appropriate in light of criteria established in the regulations.

We have looked into the specific issue you raise in your letter. On June 11, 2013, EPA Region 5 issued a Finding of Violation to Enviro-Safe for violating SNAP program regulations by marketing, producing and selling ES 22a as a substitute for HCFC-22 (R-22), an ozone-depleting substance, without submitting the required prior notice and information needed for review. ES 22a is a hydrocarbon refrigerant consisting primarily of propane. It is also marketed and sold by other chemical and trade names, including R-22a. To date, Enviro-Safe has not submitted this substance for review by the SNAP program as legally required. EPA Region 5 is currently considering its enforcement options.

The EPA has developed and posted to its website a series of questions and answers related to R-22a. We are enclosing a copy of both the Finding of Violation and the questions and answers from the EPA website. As noted in the attached letter, Enviro-Safe can contact Katie Owens at (312) 886-6097 for further information about this matter.

Again, thank you for your letter, and I hope this information is helpful. If you have further questions, please contact me or your staff may call Cheryl Mackay in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-2023.

Sincerely,

A handwritten signature in black ink, appearing to read "Janet G. McCabe", is written over a horizontal line.

Janet G. McCabe
Acting Assistant Administrator

Enclosures



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 11 2013

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Julie Price
Enviro-Safe Refrigerants, Inc.
400 Margaret Street
Pekin, Illinois 61554

Dear Ms. Price:

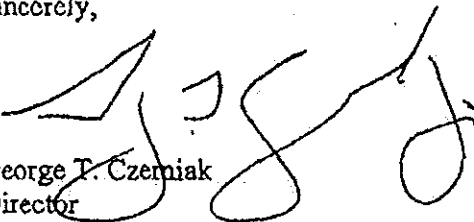
The U.S. Environmental Protection Agency is reissuing the enclosed Finding of Violation (FOV) to Enviro-Safe Refrigerants, Inc. (you). We find that you have violated the Clean Air Act, 42 U.S.C. § 7413(a) (the CAA), specifically the Significant New Alternative Policy Program regulations at 40 C.F.R. Part 82, Subpart G. EPA promulgated these regulations under Section 608 of the CAA, 42 U.S.C. § 7671g.

We are reissuing the enclosed FOV, originally issued to Enviro-Safe on April 29, 2013, to eliminate citations to any information for which Enviro-Safe has asserted Confidential Business Information (CBI) claims.

We have several enforcement options under Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3). These include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

The enclosed FOV is for your record only and does not require action on your part. The EPA contact in this matter is Katie Owens. You may call her at (312) 886-6097 if you have questions.

Sincerely,


George T. Czerniak
Director
Air and Radiation Division

Enclosure: SBREFA fact sheet

cc: Ray Pilapil, IEPA

1. Section 612 of the CAA, 42 U.S.C. § 7671k, authorizes EPA to identify, review and restrict the use of substitutes for "Class I" and "Class II" ozone-depleting substances (ODS).
2. Under Section 602(b) of the CAA, 42 U.S.C. § 7671a(b), Congress identified "HCFC-22" as a "Class II" ODS.
3. Section 612(a) of the CAA, 42 U.S.C. § 7671k(a), requires that, to the maximum extent practicable, Class I and Class II ODS be replaced by chemicals, products substitutes, or alternative manufacturing processes that reduce overall risks to human health and the environment.
4. Under Section 612(c) of the CAA, 42 U.S.C. § 7671k(c), EPA promulgated the SNAP program regulations at 40 C.F.R. Part 82, Subpart G. These regulations establish standards and requirements for the use of Class I and Class II substances used in specific major industrial sectors where a substitute is used to replace an ODS including, among other things, refrigeration and air conditioning. *See* 59 *Fed. Reg.* 13044 (March 18, 1994).
5. Among the purposes of the SNAP regulations is to provide for safe alternatives to ODS. 40 C.F.R. § 82.170(a).
6. Among the objectives of the SNAP program is to identify substitutes for ODS that present lower overall risks to human health and the environment relative to the Class I and Class II substances being replaced. 40 C.F.R. § 82.170(b).

7. Under the SNAP regulations at 40 C.F.R. § 82.176(a), any producer of a new substitute must submit a notice of intent to introduce a new substitute into interstate commerce 90 days prior to such introduction.
8. Under the SNAP regulations at 40 C.F.R. § 82.174(a), no person may introduce a new substitute into interstate commerce before the expiration of 90 days after a notice is initially submitted to EPA under 40 C.F.R. § 82.176(a).
9. Under the SNAP regulations at 40 C.F.R. § 82.172, a "producer" is defined as "any person who manufactures, formulates, or otherwise creates a substitute in its final form for distribution or use in interstate commerce."
10. Under the SNAP regulations at 40 C.F.R. § 82.172, "substitute or alternative means" is defined as "any chemical, product substitute, or alternative manufacturing process, whether existing or new, intended for use as a replacement for a class I or class II compound."
11. Under the SNAP regulations at 40 C.F.R. § 82.172, "use" is defined as "any use of a substitute for a Class I or Class II ozone-depleting compound, including but not limited to use in a manufacturing process or product, in consumption by the end-user, or in intermediate uses, such as formulation or packaging for other subsequent uses."
12. Under the SNAP regulations at 40 C.F.R. § 82.172, "person" is defined to include a corporation.
13. Under the SNAP regulations, a substitute is exempt from the notice of intent requirement of 40 C.F.R. § 82.176(a) as a so-called "second generation replacement" only if it is designed to replace a non-ODS substitute that EPA has previously approved and if the original Class I or Class II ODS refrigerant is no longer being used or is no longer available for use. *See 59 Fed. Reg. 13044, 13052.*
14. Under the SNAP regulations, it is illegal to use a hydrocarbon refrigerant as a substitute for a Class I or Class II ODS refrigerant for any end use other than industrial process refrigeration systems, or retail food refrigerators and freezers (stand-alone units only). *See 69 Fed. Reg. 11946, 11952 (March 12, 2004), and 76 Fed. Reg. 78832 (December 20, 2011).*

Factual Background

15. Enviro-Safe is a corporation with a place of business at 400 Margaret Street, Pekin, Illinois (the Pekin facility).
16. At the Pekin facility, Enviro-Safe sells and distributes a product it refers to as "Enviro-Safe 22a" or "ES 22a."

17. ES 22a is a hydrocarbon.
18. Enviro-Safe's website states that Enviro-Safe Refrigerant "contains a fresh pine scent which is added during the bottling process."
19. The Material Safety Data Sheet for ES 22a states that "flammable vapor may form if allowed to mix with air. Accumulation of gas is an ignition hazard. Vapors are heavier than air and may travel to an ignition source."
20. Hydrocarbons are flammable substances. *See, e.g.,* <http://www.epa.gov/ozone/snap/refrigerants/hc-12a.html>
21. Enviro-Safe's website states that ES 22a is "flammable to an open flame or spark."
22. Enviro-Safe's website has described the product ES 22a as a replacement for a substance known as "R-22," to be used mainly for home air conditioning units.
23. R-22 is a non-flammable ODS approved by EPA for use as a refrigerant in residential air conditioning units.
24. R-22 is another name for HCFC-22. <http://www.epa.gov/ozone/geninfo/numbers.html>
25. Enviro-Safe did not submit a notice of intent to EPA to introduce ES-22a into interstate commerce 90 days prior to such introduction.
26. EPA has not approved ES 22a as a substitute for R-22 or HCFC-22.
27. Enviro-Safe introduced ES 22a into commerce before the expiration of 90 days after a notice of intent has been initially submitted to EPA.
28. The original Class II substance that ES 22a is intended to replace, HCFC-22, is still available for use as a refrigerant and is commonly used throughout the industry.

Conclusions of Law

29. Enviro-Safe is a "person" under the SNAP regulations.
30. ES 22a is a product substitute intended for use as a replacement for a Class I or Class II compound, and thus a "substitute," as defined by the SNAP regulations at 40 C.F.R. § 82.172.
31. Enviro-Safe is a "producer" under the SNAP regulations, in that it formulates or otherwise creates a substitute in its final form for distribution or use in interstate commerce.

32. Enviro-Safe's failure to submit a notice of intent to introduce ES 22a into interstate commerce 90 days prior to such introduction constitutes a violation of 40 C.F.R. § 82.176(a).
33. Enviro-Safe's introduction of ES 22a into interstate commerce before the expiration of 90 days after a notice of intent has initially been submitted to EPA constitutes a violation of 40 C.F.R. § 82.174(a).
34. Enviro-Safe illegally marketed the hydrocarbon product, ES 22a, for unapproved end uses by marketing ES 22a as a replacement for a substance known as "R-22," to be used mainly for home air conditioning units.

Risks to Human Health and the Environment

35. The use of ES 22a, a hydrocarbon refrigerant, in home air conditioning units as a substitute for R-22 creates the potential for explosion and fires. As such, it creates a serious risk to human health and the environment.

Finding of Violation

36. For the above reasons, EPA finds that Enviro-Safe has violated the SNAP regulations at 40 C.F.R. §§ 82.174(a) and 82.176(a).

Date

6/11/13


George T. Czerniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

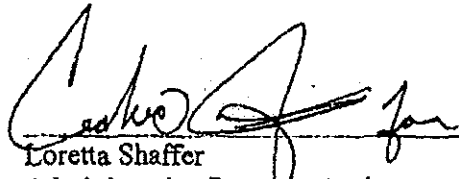
I, Loretta Shaffer, certify that I sent a Finding of Violation, No. EPA-5-13-IL-30, by Certified Mail, Return Receipt Requested, to:

Ms. Julie Price, Owner
Enviro-Safe Refrigerants, Inc.
400 Margaret Street
Pekin, Illinois 61554

I also certify that I sent copies of the Finding of Violation by first-class mail to:

Ray Pilapil, Manager
Bureau of Air
Compliance and Enforcement Section
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62702

On the 11 day of June 2013.


Loretta Shaffer
Administrative Program Assistant
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER:

7009 1680 0000 7626 0294



<http://www.epa.gov/ozone/snap/r22a.html>
Last updated on Tuesday, July 02, 2013

Ozone Layer Protection - Alternatives / SNAP

You are here: [EPA Home](#) > [Ozone Layer Protection](#) > [Alternatives / SNAP](#)

Questions and Answers about R-22a

1. What is R-22a?

R-22a, also known as 22a Refrigerant, is a highly flammable colorless gas, heavier than air. The product's Material Data Safety Sheet (MSDS) states that it is composed of "liquefied petroleum gas." Its contents have been identified as propane; in some cases, it may also contain small amounts of other hydrocarbons or a pine-scented odorant.

2. What are the potential safety risks of R-22a?

If enough R-22a is concentrated in one space, and the refrigerant comes in contact with an ignition source, it could burn or even explode.

3. Has EPA determined whether R-22a can be used safely as a refrigerant in air conditioning equipment designed for use with HCFC-22?

No. R-22a has not been submitted to EPA for review for use as a refrigerant in existing air conditioning equipment designed for use with HCFC-22 (R-22), and EPA has not approved R-22a for use in such equipment. R-22 is an ozone-depleting refrigerant which has been widely used in home air conditioning systems and its supply is now being phased out in response to the Montreal Protocol. EPA reviews health, safety and environmental impacts of refrigerants through its Significant New Alternatives Policy (SNAP) program. EPA's program to evaluate and regulate substitutes for the ozone-depleting chemicals that are being phased out under the stratospheric ozone protection provisions of the Clean Air Act (CAA). In Section 612(c) of the CAA, the Agency is authorized to identify and publish lists of acceptable and unacceptable substitutes.

4. Is it legal to sell R-22a for use as a refrigerant in air conditioning equipment designed for use with HCFC-22?

No. The CAA and EPA's regulations prohibit the introduction into interstate commerce of substitutes that have not been submitted to EPA for review and listing under 40 CFR 82.176 (a).

5. If R-22a is not legal for use as a refrigerant in air conditioning equipment designed for use with HCFC-22 (see Q&A 4), what is EPA doing about it?

EPA cannot comment on any specific enforcement actions that it may be undertaking or that are in the early stages of investigation. We are looking into allegations of illegal activity regarding the sale of R-22a as a refrigerant and will take enforcement actions where

appropriate.

Here is an example of a recent enforcement action that EPA has taken.

6. Are there other flammable hydrocarbons or blends that EPA has determined can be used safely in air conditioning equipment designed for use with HCFC-22?

No. EPA has not found acceptable any flammable hydrocarbon refrigerants for use in existing air conditioning systems designed for use with HCFC-22. Use of flammables as a retrofit in equipment that was designed for nonflammable materials presents risks to consumers, to the equipment, and to service technicians who may not be prepared for handling flammable refrigerants. Further, EPA is aware that in some cases, use of flammable refrigerants to replace materials used by the manufacturer in the equipment's original charge will void the warranty. Additional Information: EPA has prohibited the use of the following hydrocarbon refrigerants in air conditioning systems: Hydrocarbon Blend A (sold under the name OZ-12®) and Hydrocarbon Blend B (sold under the names DURACOL 12a® and HC-12a®). In addition, EPA is aware that a number of refrigerants with "22a" or "R-22a" in the name contain flammable hydrocarbons and are being sold for use in air conditioning systems, but they have never been submitted to EPA for the required health, safety and environmental review and are therefore not approved for use in air conditioning systems.

7. Which refrigerants are allowed to be used in air conditioning systems for air conditioning equipment designed for use with HCFC-22?

You can find EPA's lists of acceptable refrigerants for different uses online at this link: <http://www.epa.gov/ozone/snap/refrigerants/index.html> The list of acceptable refrigerants for use in home air conditioning is at this link: "Acceptable Substitutes in Household and Light Commercial Air Conditioning."

8. Are there other flammable hydrocarbons or blends that EPA has found can be used safely as refrigerants in refrigeration and air conditioning, other than in air conditioning equipment designed for use with HCFC-22?

EPA has not listed any flammable hydrocarbons¹ as acceptable substitutes for use in air conditioning equipment to date; however, EPA has listed a number of flammable hydrocarbon refrigerants as acceptable substitutes for specific refrigeration uses, including:

- butane, propane, propylene, Hydrocarbon Blends A and B (trade names OZ-12® for blend A; and HC-12a® and DURACOL 12a® for blend B) in industrial process refrigeration;
- isobutane (R-600a) as acceptable, subject to use conditions, in new household refrigerators, freezers, and combination refrigerators and freezers;
- propane (R-290) as acceptable, subject to use conditions, in new retail food refrigerators and freezers (stand alone units only); and
- R-441A, a hydrocarbon refrigerant blend consisting of ethane, propane, isobutane, and n-butane (trade name HCR-188C), found acceptable subject to use conditions in new household refrigerators, freezers, and combination refrigerator/freezers.

EPA notes that the listings for household and commercial refrigerators and freezers apply only to equipment that was specifically designed to be used with that refrigerant. The Agency

has not found hydrocarbon refrigerants acceptable for use in refrigerators that were originally made for a different, non-flammable refrigerant.

These determinations were based on detailed assessments of the risks posed by each flammable refrigerant in the particular application or type of equipment to be used. In addition, EPA's regulations adopt the results of safety reviews by industry standards setting bodies as mandatory use conditions. So, our rules further reduce risk by setting requirements for the amount of refrigerant used, design and testing of equipment, and warning labels, among other things. Generally speaking, flammable refrigerants can be safely used where equipment has been specifically designed to operate safely using them. Use of flammables as a retrofit in equipment that was designed for nonflammable materials presents risks to consumers, to the equipment, and to service technicians who may not be prepared for handling flammable refrigerants.

EPA issued this press release, "EPA Warns Against Use of Refrigerant Substitutes That Pose Fire and Explosion Risk" (July 1, 2013).

1. EPA has reviewed and found acceptable some refrigerant blends that contain more than 95% non-flammable compounds and less than 5% hydrocarbons.